## Finding the Greatest Common Factor

Build a set of factor trees for each of the number pairs below, recording each factor on a Post-it note. Then, transfer the prime factors to the Venn diagram. Which prime factors do the number pairs have in common? What is the greatest common factor?

Number pairs:
$30,45 \quad 40,70 \quad 63,42 \quad 81,54 \quad 33,99$


Describe your method for finding the greatest common factor of any two numbers.

One number has the prime factors $2,3,5$, and $x$. Another number has the prime factors 2,5 , 7 , and $x$. What is the greatest common factor between these two numbers? Explain how you know this.

